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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/897,736	07/02/2001	Mikhail Ivanovich Trifonov	1202.018US1	8184

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EXAMINER

CHANG, JON CARLTON

ART UNIT PAPER NUMBER

2623

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/897,736	<b>Applicant(s)</b> TRIFONOV ET AL.	
	<b>Examiner</b> Jon Chang	<b>Art Unit</b> 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4-7, 23, 24, 31-33 and 35-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-7, 31 and 32 is/are allowed.
- 6) ☒ Claim(s) 23, 24, 33, 35-40 and 43 is/are rejected.
- 7) ☒ Claim(s) 41 and 42 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Applicants' Amendment and Arguments***

1. The amendment filed November 12, 2004 has been entered and made of record. Claims 4-7, 23-24, 31-33 and 35-43 are pending.

The objection to the claims because of informalities is withdrawn in light of the amendment.

In response to the new drawings, the objection to the drawings is withdrawn.

With regard to the rejection under 35 U.S.C. § 112, second paragraph, Applicants' amendment has cancelled claims 27 and 29 thereby rendering their rejection moot. The amendment cures the problems with claims 31 and 33, so the rejection of those claims is withdrawn. The amendment does not satisfactorily address the problem with claims 23 and 24. There is still a problem with the language. Note, for example, in claim 23, the language, "wherein detection of only lines of a predetermined width excludes the detection of at least some edge features." This language is written as if to further define a detection step. However, there is no previous detection step. It would make more sense, for example, to have a step of "detecting only lines of a predetermined width," and then further define that with, "wherein the detection of only lines of a predetermined width excludes the detection of at least some edge features." Similarly, in claim 24, the language, "wherein detection of only lines of a predetermined darkness or brightness excludes the detection of at least some edge features," is written as if to further define a detection step, without a previous detection step being present in the claim.

The cancellation of claims 1-3, 8-22, 25-30 and 34 renders moot the rejections under 35 U.S.C. §§ 102 and 103, as well as the double patenting rejection.

Claims 4-7, indicated in the last Office Action as containing allowable subject matter, have been rewritten into independent form. These claims are therefore allowable.

This Office Action contains new grounds of objection and rejection, necessitated by Applicants' amendment.

### ***Objection to the Amendment***

2. The amendment filed November 12, 2004 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

a) In the drawings, in Fig.30, the mathematical relation in block 3010 is not supported by the original disclosure. In particular, the use of " $\sqrt{6}$ " is not supported.

b) The amendments to the specification which change the various equations/mathematical relations at the following locations (it is noted that Applicants, in their amendment, have incorrectly presented the text of the original specification being replaced):

- i) page 8, line 10 (changes " $1/(26)$ " to " $1/2\sqrt{6}$ ", and " $1/22$ " to " $1/2\sqrt{2}$ ";
- ii) page 8, line 18 (changes " $2/3$ " to " $2/\sqrt{3}$ ";
- iii) page 9, line 5 (changes " $0.5/6$ " to " $0.5/\sqrt{6}$ ";

- iv) page 9, line 6 (changes " $0.5/2$ " to " $0.5/\sqrt{2}$ ");
- v) page 9, line 10 (changes " $1/6$ " to " $1/\sqrt{6}$ ");
- vi) page 9, line 11 (changes " $0.5/6$ " to " $0.5/\sqrt{6}$ ", and " $0.5/2$ " to " $0.5/\sqrt{2}$ ");
- vii) page 9, line 12 (changes " $0.5/6$ " to " $0.5/\sqrt{6}$ ", and " $0.5/2$ " to " $0.5/\sqrt{2}$ ");
- viii) page 9, line 13 (changes " $1/6$ " to " $1/\sqrt{6}$ ");
- ix) page 9, line 14 (changes " $0.5/6$ " to " $0.5/\sqrt{6}$ ", and " $0.5/2$ " to " $0.5/\sqrt{2}$ ");
- x) the paragraph at page 9, lines 17-21 (changes " $(a^2 + b^2)$ " to " $\sqrt{(a^2 + b^2)}$ ");
- xii) the paragraph at page 15, lines 7-13 (changes " $c_1/6$ " to " $c_1/\sqrt{6}$ ");
- xiii) the paragraph at page 18, lines 9-18 (changes " $c_1/6$ " to " $c_1/\sqrt{6}$ ", three occurrences);
- xiv) the second paragraph inserted at page 18, line 20 (States that the operations can be implemented by a computer having hardware and software that enable execution of the process. Support is only provided for computer having hardware and software for the method of original claim 1. Additionally, the amendment adds the relation " $B_0 - c_1/\sqrt{6}$ " which is not supported.

Applicant is required to cancel the new matter in the reply to this Office Action.

With the current amendment as evidence, attempts to change the equations/mathematical relations in the specification back to their original form could raise issues of non-enablement under 35 U.S.C. § 112, first paragraph, as well as non-operability under 35 U.S.C. § 101.

***Claim Rejections - 35 USC § 112***

3. Claims 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23 and 24 are unclear. There seems to be some words missing such that there is an apparent lack of antecedent basis for some of the terms. For example, in claim 23, note the language, "wherein detection of only lines of a predetermined width excludes the detection of at least some edge features." This language is written as if to further define a detection step. However, there is no previous detection step. It would make more sense, for example, to have a step of "detecting only lines of a predetermined width," and then further define that with, "wherein the detection of only lines of a predetermined width excludes the detection of at least some edge features." Similarly, in claim 24, the language, "wherein detection of only lines of a predetermined darkness or brightness excludes the detection of at least some edge features," is written as if to further define a detection step, without a previous detection step being present in the claim.

4. Claims 33, 35-40 and 43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

a) Claims 35-40 and 43 are drawn to computer-readable medium having computer-executable instructions for performing various operations. The original disclosure (original renumbered claim 34) only provides support for computer-executable instructions for the operations of original claim 1. New claims 35-40 and 43 recite operations which were not present in original claim 1.

b) The amendment to claim 33 adds the relation, " $B_0 - C_1/\sqrt{6}$ ", which is not supported by the original disclosure.

#### ***Duplicate Claims***

5. Claims 41 and 42 are objected to under 37 CFR 1.75 as being a substantial duplicate of claims 31 and 32. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Subject Matter Not Found in the Prior Art***

6. The subject matter of claims 33, 35-40 and 43 have not been found in the prior art. Allowability cannot be indicated in view of the rejection under 35 U.S.C. § 112, first paragraph.

#### ***Allowable Subject Matter***

7. Claims 4-7 and 31-32 are allowed.

8. Claims 23 and 24 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

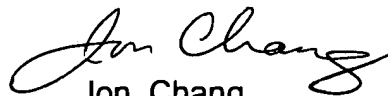
### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon Chang whose telephone number is (571) 272-7417. The examiner can normally be reached on M-F 8:00 a.m.-6:00 p.m..



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (571)272-7414. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jon Chang  
Primary Examiner  
Art Unit 2623

Jon Chang  
May 29, 2005